

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Jang
Application No.:	<i>Not yet assigned</i>
Filed:	<i>Concurrently herewith</i>
For:	INTRAVASCULAR STENT
Examiner:	<i>Not yet assigned</i>
Group Art Unit:	<i>Not yet assigned</i>

Box Patent Application
Commissioner for Patents
Washington, D.C. 20231

Docket No.: S63.2-9950

PRELIMINARY AMENDMENT

Before beginning examination and calculating the fees in this application, please amend the above-identified application as indicated below:

In the Specification

Page 1, please delete lines 2-12 and replace with the following:

--This application is a continuation of U.S. Patent Application number 09/574,077 which is a continuation of U.S. Patent Application number 08/845,734 which is a continuation-in-part of U.S. Patent Application number 08/824,142, and a continuation-in-part of U.S. Patent Application number 08/824,866 and a continuation-in-part of U.S. Patent Application number 08/824,865 and is a continuation-on-part of U.S. Patent Application number 08/845,657 all of which are incorporated herein by reference. This application claims the benefit of Provisional Patent Application No. 60/017,484 filed April 26, 1996, the disclosure of which is incorporated by reference.--

In the Claims

Please cancel claims 1-33 without prejudice or disclaimer.

Please add new claims 34-43 as follows:

34.(New) A stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first serpentine expansion column having a proximal end region and a distal end region,

a plurality of interconnected second expansion struts, the second expansion struts forming a second serpentine expansion column having a proximal end region and a distal end region,

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first serpentine expansion column, a second end extending from the proximal end region of the second serpentine expansion column and at least one curved region between the first end and the second end of the first connecting strut, the first end of the first connecting strut longitudinally and circumferentially offset from the second end of the first connecting strut.

35.(New) The stent of claim 34 wherein the first expansion struts and the first connecting struts are provided in a ratio of 2:1.

36.(New) The stent of claim 34 wherein the first expansion column comprises a plurality of loops in the distal end region and a plurality of loops in the proximal end region, the second expansion column comprises a plurality of loops in the distal end region and a plurality of loops in the proximal end region, and each first connecting strut has a first end which extends from a side of one loop in the distal end region of the first expansion column and a second end which extends from a side of one loop in the proximal end region of the second expansion column.

37.(New) A stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first expansion column having a proximal end region and a distal end region, each first expansion strut connected only at a proximal end to one first expansion strut adjacent thereto and only at a distal end to another first expansion strut adjacent thereto;

a plurality of interconnected second expansion struts, the second expansion struts forming

a second expansion column having a proximal end region and a distal end region, each second expansion strut connected only at a proximal end to one second expansion strut adjacent thereto and only at a distal end to another second expansion strut adjacent thereto;

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first expansion column, a second end extending from the proximal end region of the second expansion column and at least one curved region between the first end and the second end of the connecting strut, the first end of the first connecting strut longitudinally and circumferentially offset from the second end of the first connecting strut.

38.(New) The stent of claim 37 wherein the first expansion column comprises a plurality of loops in the distal end region and a plurality of loops in the proximal end region, the second expansion column comprises a plurality of loops in the distal end region and a plurality of loops in the proximal end region, and each first connecting strut has a first end which extends from a side of one loop in the distal end region of the first expansion column and a second end which extends from a side of one loop in the proximal end region of the second expansion column.

39.(New) A stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first serpentine expansion column having a proximal end region and a distal end region, first expansion struts which are adjacent one another connected via a curved member,

a plurality of interconnected second expansion struts, the second expansion struts forming a second serpentine expansion column having a proximal end region and a distal end region, second expansion struts which are adjacent one another connected via a curved member,

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first expansion column and a second end extending from the proximal end region of the second expansion column and at least one curved portion;

the first serpentine expansion column, the second serpentine expansion column and the first connecting strut column forming a plurality of geometric cells about the circumference of

the stent,

each geometric cell having a proximal region extending between two adjacent first expansion struts, a distal region extending between two adjacent second expansion struts and a middle region extending between two adjacent first connecting struts, the proximal region and the distal region circumferentially offset from one another.

40.(New) The stent of claim 39 wherein each first connecting strut includes at least two curved portions.

41.(New) The stent of claim 40 wherein the first expansion struts and the first connecting struts are provided in a ratio of 2:1.

42.(New) A stent comprising a plurality of cells having a first end portion which extends substantially in a longitudinal direction and a second end portion which extends substantially in a longitudinal direction, the second end portion longitudinally and circumferentially offset from the first end portion, the first end portion connected to the second end portion via a plurality of connecting members each of which has a plurality of curved sections.

43.(New) The stent of claim 43 where each connecting member has a first end and a second end which is circumferentially and longitudinally offset from the first end.--

REMARKS

The specification has been amended on page 1 to indicate that this application is a continuation of US Patent Application number 09/574,077 which is a continuation of US Patent Application number 08/845,734 which is a continuation-in-part of US Patent Application number 08/824,142, and a continuation-in-part of US Patent Application number 08/824,866 and a continuation-in-part of US Patent Application number 08/824,865 and is a continuation-on-part of US Patent Application number 08/845,657. The specification has also been amended to recite that this application claims the benefit of Provisional Patent Application No. 60/017,484 filed April 26, 1996, through the chain of priority.

Claims 1-33, the subject of prosecution of the parent application, have been canceled without prejudice or disclaimer.

New claims 34-43 have been added. Support for the new claims is as follows:

<u>Claim</u>	<u>Support</u>
34-35	Fig. 9a, Fig. 10a as filed, specification page 22, lines 13-15;
36	Fig. 10a as filed, specification page 22, lines 13-15;
37	Fig. 9a, Fig. 10a as filed, specification page 22, lines 13-15;
38	Fig. 10a as filed, specification page 22, lines 13-15; and
39-43	Figs. 9a as filed;


Other support may also be found in the application. No new matter has been added by the amendments.

Respectfully submitted,

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Marked-up Amendments:

In the Specification:

On page 1, lines 2-12 have been deleted and replaced with the following text:

--This application is a continuation of U.S. Patent Application number 09/574,077 which is a continuation of U.S. Patent Application number 08/845,734 which is a continuation-in-part of U.S. Patent Application number 08/824,142, and a continuation-in-part of U.S. Patent Application number 08/824,866 and a continuation-in-part of U.S. Patent Application number 08/824,865 and is a continuation-on-part of U.S. Patent Application number 08/845,657 all of which are incorporated herein by reference. This application claims the benefit of Provisional Patent Application No. 60/017,484 filed April 26, 1996, the disclosure of which is incorporated by reference --

In the Claims

Claims 1-33 have been canceled without prejudice or disclaimer.

New claims 34-43 have been added as follows:

34.(New)

A stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first serpentine expansion column having a proximal end region and a distal end region,

a plurality of interconnected second expansion struts, the second expansion struts forming a second serpentine expansion column having a proximal end region and a distal end region,

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first serpentine expansion column, a second end extending from the proximal end region of the second serpentine expansion column and at least one curved region between the first end and the second end of the first connecting strut, the first end of the first connecting strut longitudinally and circumferentially offset from the second end of the first connecting strut.

35.(New) The stent of claim 34 wherein the first expansion struts and the first connecting struts are provided in a ratio of 2:1.

36.(New) The stent of claim 34 wherein the first expansion column comprises a plurality of loops in the distal end region and a plurality of loops in the proximal end region, the second expansion column comprises a plurality of loops in the distal end region and a plurality of loops in the proximal end region, and each first connecting strut has a first end which extends from a side of one loop in the distal end region of the first expansion column and a second end which extends from a side of one loop in the proximal end region of the second expansion column.

37.(New)

A stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first expansion column having a proximal end region and a distal end region, each first expansion strut connected only at a proximal end to one first expansion strut adjacent thereto and only at a

distal end to another first expansion strut adjacent thereto;

a plurality of interconnected second expansion struts, the second expansion struts forming a second expansion column having a proximal end region and a distal end region, each second expansion strut connected only at a proximal end to one second expansion strut adjacent thereto and only at a distal end to another second expansion strut adjacent thereto;

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first expansion column, a second end extending from the proximal end region of the second expansion column and at least one curved region between the first end and the second end of the connecting strut, the first end of the first connecting strut longitudinally and circumferentially offset from the second end of the first connecting strut.

38.(New) The stent of claim 37 wherein the first expansion column comprises a plurality of loops in the distal end region and a plurality of loops in the proximal end region, the second expansion column comprises a plurality of loops in the distal end region and a plurality of loops in the proximal end region, and each first connecting strut has a first end which extends from a side of one loop in the distal end region of the first expansion column and a second end which extends from a side of one loop in the proximal end region of the second expansion column.

39.(New) A stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first serpentine expansion column having a proximal end region and a distal end region, first expansion struts which are adjacent one another connected via a curved member.

a plurality of interconnected second expansion struts, the second expansion struts forming a second serpentine expansion column having a proximal end region and a distal end region, second expansion struts which are adjacent one another connected via a curved member.

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first expansion column and a second end extending from the proximal end region of the second expansion column and at least one curved portion;

the first serpentine expansion column, the second serpentine expansion column and the first connecting strut column forming a plurality of geometric cells about the circumference of the stent.

each geometric cell having a proximal region extending between two adjacent first expansion struts, a distal region extending between two adjacent second expansion struts and a middle region extending between two adjacent first connecting struts, the proximal region and the distal region circumferentially offset from one another.

40.(New) The stent of claim 39 wherein each first connecting strut includes at least two curved portions.

41.(New) The stent of claim 40 wherein the first expansion struts and the first connecting struts are provided in a ratio of 2:1.

42.(New) A stent comprising a plurality of cells having a first end portion which extends

substantially in a longitudinal direction and a second end portion which extends substantially in a longitudinal direction, the second end portion longitudinally and circumferentially offset from the first end portion, the first end portion connected to the second end portion via a plurality of connecting members each of which has a plurality of curved sections.

43.(New) The stent of claim 43 where each connecting member has a first end and a second end which is circumferentially and longitudinally offset from the first end.--